

1 Identification

GHS Product Identifier

MultiCyt QBeads DevScreen with Streptavidin Beads
Contains: sodium azide 0.09%, streptavidin

Other means of identification

Product Numbers: 90748 through 90795

Recommended use of the chemical and restriction on use

SU24 scientific research and development.

This product is manufactured and sold by IntelliCyt Corporation for research use only. The kit and components are not intended for diagnostic or therapeutic use.

Supplier's details

IntelliCyt Corporation
9620 San Mateo Blvd. NE
Albuquerque, NM 87113
USA

Emergency phone number

+1 505-345-9075

2 Hazard(s) identification

Classification of the substance or mixture

Toxic to Reproduction (Fertility) Category 1B
Toxic to Reproduction (Unborn Child) Category 1B

GHS label elements

Danger



Fatal if swallowed or in contact with skin

May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Very toxic to aquatic life with long lasting effects

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not get in eyes, on skin, or on clothing.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF exposed or concerned: Get medical advice/ attention.

Store locked up.

Dispose of contents/container to approved waste disposal plant.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
water	7732-18-5	231-791-2	98.874	
EDTA tetrasodium salt	64-02-8	200-573-9	0.416	
boric acid	10043-35-3	233-139-2	0.31	
sodium tetraborate	1303-96-4	215-540-4	0.14	
bovine serum albumin	9048-46-8	232-936-2	0.1	
sodium azide	26628-22-8	262-822-8	0.01	
polysorbate 20 (TWEEN)	9005-64-5	500-018-3	0.05	
Polystyrene divinylbenze	9003-70-7	500-008-9	0.0001	
polystyrene beads/streptavidin coating	9013-20-1		3e-005	

4 First-aid measures

Description of necessary first-aid measures

Eyes: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for 10 minutes if irritation occurs.

Skin: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Systemic: Inhalation: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations. Skin contact: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations. Ingestion: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms/effects, acute and delayed

Inhalation: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations. Skin contact: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations. Ingestion: Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations.

Indication of immediate medical attention and special treatment needed, if necessary

Contact emergency medical personnel immediately.

5 Fire-fighting measures

Suitable extinguishing media

Extinguishing media: Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.

Unsuitable extinguishing media: Strong water jet.

Specific hazards arising from the chemical

In a fire, or if heated, a pressure increase will occur and the container may burst. Sodium oxides/Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals, such as lead, copper, gold, and silver, borane/boron oxides.

Special protective actions for fire-fighters

As with any fire, fire fighters wear self-contained breathing apparatus and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist or gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of information in Section 8 on suitable and unsuitable materials.

Environmental precautions

Avoid dispersal of spilled material and runoff contact with soil, waterways, drains and sewers. Inform the relevant

authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

7 Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Store at 2-8°C. Keep refrigerated. Do not freeze. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 Exposure controls/personal protection

Control parameters

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Appropriate engineering controls

In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn--unless the assessment indicates a higher degree of protection:
safety glasses with side-shields
chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. The time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9 Physical and chemical properties

Physical and chemical properties

Boiling Point: 100°C / 212°F
Density (particles): ~1.1 - ~1.8 g/cm
Solubility: dispersible in water
Appearance: brown liquid suspension that may striate

10 Stability and reactivity

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Product may irreversibly aggregate if frozen.

Incompatible materials

Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition products

Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals such as, lead, copper, gold and silver.

11 Toxicological information

Toxicological (health) effects

See Section 2.

Information on the likely routes of exposure

Skin contact, inhalation, swallowing.

Symptoms related to the physical, chemical and toxicological characteristics

Sodium azide may result in eye and skin irritation. Ingestion may result in nausea, headache, and vomiting. Contact with boric acid whether through inhalation, skin, or ingestion acid one may have adverse symptoms such as: reduced fetal weight increase in fetal deaths skeletal malformations.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sodium azide can cause cancer, or alter genetic material. Target organs include heart, nerves, and brain. Boric acid may damage fertility. Reproductive toxicity, fetotoxicity- Presumed human reproductive toxicant. Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes. Studies with the chemically related boric acid in the rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus, including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those to which humans would normally be exposed. Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid dust and sodium borate dust. A recent epidemiological study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

Numerical measures of toxicity (such as acute toxicity estimates)

Acute Toxicity : Boric acid - C50 Inhalation Gas.Rat > 0.16 mg/l4 hours LD50 Dermal Rabbit>2000 mg/ kg-LD50 OralRat 2660 mg/kg Sodium tetraborate decahydrate - LD50 Oral-Rat-4,500 -5,000 mg/kg Inhalation LD50 Dermal- Rabbit-10,000 mg/kg Irritation/Corrosion: Boric acid- Skin - Mild irritant Human-72 hours 15 milligrams Intermittent. Sodium azide is known to be highly toxic.

Interactive effects

No data available.

12 Ecological information

Toxicity

Boric acid - Acute LC50 84.28 mg/l Marine water Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling) 48 hours Acute LC50 133000 µg/l Fresh water Daphnia - Daphnia magna - Neonate 48 hours Acute LC50 100000 µg/l Fresh water Fish -Ptychocheilus lucius -Juvenile (Fledgling, Hatchling, Weanling) 96 hours Chronic NOEC 6000 µg/l Fresh water Daphnia - Daphnia magna 21 days Chronic NOEC 2100 µg/l Fresh water Fish - Oncorhynchus mykiss 87 days.

Sodium tetraborate decahydrate - Toxicity to fish LC50 - Carassius auratus (goldfish) - 178 mg/l- 72 h Toxicity to daphnia and other aquatic invertebrates: EC50-Daphnia magna (Water flea)-1,085 -1,402 mg/l-48 h Toxicity to algae: IC50 -Desmodesmus subspicatus (green algae) -158 mg/l-96 h

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

13 Disposal considerations

Disposal methods

Dispose of waste according to directive 2008/98/EC, covering waste and dangerous waste. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on- site wastewater treatment facility.

14 Transport information

UN Number

UN1687

UN Proper Shipping Name

MultiCyt QBeads DevScreen with Streptavidin Beads

Transport hazard class(es)

6.1

Environmental hazards

Environmentally Hazardous Substance

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

EU Regulation (EC) No. 1907/2006 (REACH):

Annex XIV - List of substances subject to authorization:

Substances of very high concern: None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles: Not applicable.

16 Other information

Other information

The statements contained herein are offered for informational purposes only and are based upon technical data. IntelliCyt Corporation believes them to be accurate at the date of publication, but does not purport to be all-inclusive. The above-stated product is intended for use only by persons having the necessary technical skills and facilities for handling the product at their discretion and risk. Since conditions and manner of use are outside our control, we (IntelliCyt Corporation) make no warranty of merchantability or any such warranty, express or implied with respect to information and we assume no liability resulting from the above product or its use. Users should perform their own investigations to determine suitability of information and product for their particular purposes.